

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: application of:	:	
Nian-hua Ou	:	
	:	Group Art Unit: 3632
Serial No. 10/071,376	:	
	:	Examiner: Amy Jo Sterling
Filed: February 8, 2002	:	
	:	Confirmation No. 1739
For: Laminated Wood Piece and Door	:	
Containing the Same	:	
_____	x	

**REPLY BRIEF TO EXAMINER'S ANSWER**

This Reply Brief is being submitted in response to the Examiner's Answer  
mailed on November 27, 2006.

This brief contains these items under the following headings, and in the order  
set forth below:

- I. STATUS OF CLAIMS
- II. GROUNDS OF REJECTION TO BE REVIEWED ON  
APPEAL
- III. ARGUMENTS

**I. Status of Claims**

The status of the claims in this application are:

**A. Total Number of Claims in Application**

Claims in the application are: 1-3, 5-8, and 10-16

**B. Status of all of the Claims**

1. Claims canceled: 4, and 9
2. Claims withdrawn from consideration but not cancelled: NONE
3. Claims pending: 1-3, 5-8, and 10-16
4. Claims allowed: NONE
5. Claims rejected: 1-3, 5-8, and 10-16

**C. Claims on Appeal**

The claims on appeal are: 1-3, 5-8, and 10-16

**II. Grounds of Rejection To Be Reviewed On Appeal**

(1) Claims 1 – 3 and 5 – 8 stand rejected under 35 U.S.C. §103 as being obvious in view of Iwata, U.S. Patent No. 5,554,429 ("Iwata").

(2) Claims 10-16 stand rejected under 35 U.S.C. §103 as being obvious in view of the combination of West, U.S. Patent No. 6,092,343 ("West") and Iwata.

**III. Arguments—Rejections under 35 U.S.C. §103**

***(1) Claims 1 – 3 and 5 – 8 stand rejected under 35 U.S.C. §103 as being obvious in view of Iwata, U.S. Patent No. 5,554,429 ("Iwata").***

In the Answer to Appellant's Appeal Brief, the Examiner asserts that:

Although the Iwata et al. does not recite the exact ranges of dimensions these ranges are obvious design choices for a laminated wood piece because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *See in re Aller*, 15 U.S.P.Q. at 233. (Examiner's Answer, November 27, 2006, page 7).

However, as the Appellants have noted previously, (see Pages 5 – 6 of Appellants' Appeal Brief, September 16, 2006), the Examiner has failed to show where Iwata (or any part of the prior art) discloses the general conditions of the present claims so that the remaining subject matter represents only optimum or workable ranges or dimensions involving only routine skill in the art. Specifically, Iwata does not have any teaching that would have motivated a person of ordinary skill to optimize the length, width, screw holding strength, and split resistance strength as recited in the present claims.

In attempting to identify where Iwata discloses the ranges for lengths and widths recited in the present claims, the Examiner asserts that:

In the present case, these dimension ranges would only involve routine skill in the art because, the ranges are broad and that of a typical door style and the specification lacks any criticality as to why these particular dimensions of length and width may be

important to the alleged invention. It was well known at the time of the invention that a laminated wood piece with the desired use of a door style may be from 3 to 6 cm and about 120 to 305 cm, because these dimension would fit an average door. (Examiner's Answer, Page 8).

Appellants disagree with the Examiner's argument and indeed note that in the Examiner's argument, the motivation to modify Iwata to arrive at ranges recited in the present claims arises merely because a person of ordinary skill might make this modification based on the purported average dimensions of the average door. However, it is inappropriate for the Examiner to assert that the modification is obvious merely because a person of ordinary skill in the art might make this modification; this represents an "obvious to experiment" standard which is improper without some teaching of reasonable expectation of success of modifying the reference. *In re Dow Chem.*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988) ("Both the suggestion [to modify] and the expectation of success must be found in the prior art, not in the Applicant's disclosure."); *In re Clinton*, 188 U.S.P.Q. 365, 367 (C.C.P.A. 1976). Here, there is no such evidence that a person of ordinary skill would have been motivated to modify Iwata in the manner suggested by the Examiner in view of the purported dimensions of an average door.

With respect to the screw holding strength, the Examiner again concedes that Iwata fails to disclose any range for screw holding strength, but asserts instead that:

The screw holding strength, which is a test result feature, is also obvious in that the optimizing of such test results, especially to fit within a broad range of 400 to 1200 lbs., is routine in testing the strength of wood in many applications. Clearly absent from the specification and claim 5 is the recitation of any specific structure, chemical component or physical characteristic that would provide

these particular test results. Therefore these predetermined results would merely be an optimization of routine engineering, easily fit due to the broad range, which case law has specifically stated to be obvious. See *in re Aller*, 105 USPQ 233. (Examiner's Answer, Pages 8-9).

The Examiner's reasoning is unclear. The Examiner appears to be making an inherency argument when he asserts that the values for the screw holding strength recited in the present claims would be found by "testing the strength of wood in many applications" (Examiner's Answer, Pages 8-9). However, the Examiner does not explicitly mention the word "inherency" and in any case fails to provide any substantiation of an inherency argument.

Undermining the Examiner's assertion that the screw holding strength is "routine" is that the Examiner has failed to find any mention of this claim feature in the prior art and specifically that the prior art fails to teach any values for this claim feature. (Appellants have found only a single documented mention of "screw holding strength", which is set forth in the Specification at Paragraph 0051). Appellants believe that it is very difficult to optimize a parameter, *per Aller*, for which the prior art is completely silent on the suitable values.

Additionally, the Examiner has also asserted that, "[c]learly absent from the specification and claim 5 is the recitation of any specific structure, chemical component or physical characteristic that would provide these particular [screw holding strength] test results" (Examiner's Answer, Page 8). Appellants disagree with the Examiner. The specific structure that provides these results is set forth in great detail throughout the specification and claims: this structure is the combination of the wood composite component and the solid

hardwood component within the recited certain physical ranges and sizes as presently claimed.

Additionally, Appellants note that the Examiner has failed to respond to Appellants previous assertions that Iwata is silent on the split resistance strength and that producing a laminated wood piece having the claimed split resistance value would not be obvious to a person of ordinary skill in the art.

*(2) Claims 10-16 stand rejected under 35 U.S.C. §103 as being obvious in view of the combination of West, U.S. Patent No. 6,092,343 ("West") and Iwata.*

Although the Examiner has repeatedly alleged throughout the prosecution of the present application that a person of ordinary skill in the art would have been motivated to combine Iwata and West, only in the Examiner's Answer of November 27, 2006 has the Examiner actually provided a substantive explanation for the assertion that a person of ordinary skill in the art would have been motivated to combine Iwata and West:

West et al. teaches, "Recent engineering changes in wood doors have made use of laminated wood materials with thin surface veneers in an attempt to overcome the disadvantages associated with solid wood members". (See Col. 1, lines 18 – 22). Iwata et al. strengthens this motivation, stating that "the insufficiency of lumber resources and the protection of forests have become problems" (See Col. 1, lines 13 and 14). Therefore the West et al. references teaches that the use of a laminate wood piece is common in the making of a door, the specifics of a laminate wood piece being taught by Iwata et al., the combination of which is motivated by the desire to save hard wood resources. (Examiner's Answer, Page 10).

Appellants assert that this rationale for combining Iwata and West falls short of what the Examiner is required to provide to sustain a case of *prima facie* obviousness. In particular, the Examiner's rationale fails to explain how the isolated teachings from the references mentioned above would have motivated a person of ordinary skill to combine the references in the manner suggested by the Examiner, *viz.*, to use the teachings of a laminate wood piece in Iwata in a door structure as taught by West.

**Conclusion**

In light of all of the reasons delineated herein, Appellants submit that rejected Claims 1-3, 5-8, and 10-16 are patentable over the art of record. Appellant hereby requests the Board to reverse the decision by the Examiner to finally reject Claims 1-3, 5-8, and 10-16 in the present Application.

Respectfully submitted,  
Nian Ou et al.

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Date

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